Title: A CASE OF RABIES TRANSMITTED BY CONTACT OF SALIVA OVER MUCUOUS MEMBRANE

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Keywords Human mucosa or fresh skin wounds

Abstract Rabies is the only communicable disease of man that is always fatal. it is transmitted to humans when infectious material from an infected animal, usually saliva, comes into direct contact with human mucosa or fresh skin wounds.

Case Report :

A CASE OF RABIES TRANSMITED BY CONTACT OF SALIVA OVER MUCOUS MEMBRANE

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INTRODUCTION

Rabies is the only communicable disease of man that is always fatal. It is transmitted to humans, when infectious material from an infected animal, usually saliva, comes into direct contact with human mucosa or fresh skin wounds. In such cases, the victim may contract the disease, unless they receive adequate post-exposure prophylaxis.[1] Dogs are the source of the vast majority of human rabies deaths, contributing up to 99% of all rabies transmissions to humans.[2] The virus is excreted in the saliva of the affected animals. Typically, viral shedding in saliva is concomitant with illness, but virus may be present in saliva for several days or more, before the onset of obvious clinical signs.[3] Transmission has also been documented rarely via other routes such as contamination of mucus membranes (eyes, nose, mouth), aerosol transmission and corneal and organ transplantation.[3,4]

CASE REPORT

Mr Sanischar Kerketta, a 40 year old male resident of Baunsapada, Sundergarh town in Sundergarh district of Odisha, presented to the Community Medicine OPD, VIMSAR, Burla, on 28-11-2017, at around 4 pm, with complaints of inability to drink or feed for the past 2 days. He had studied upto second standard and was a daily wage labourer by occupation. He did not give any history of sustaining a dog bite or any other animal bite. He was addicted to alcohol. At the time of presentation, he had a very uncharacteristic cough, which seemed to be more of a response to choking and was suggestive of laryngospasm. On persistent probing, the patient, through gestures, established a history of having shared food with a stray dog 14 days ago. The dog was untraceable at the time of presentation. The attendants accompanying the patient could not give any history of any other exposure to animal bite. On examination, he was conscious and oriented but irritable. He had aerophobia and hydrophobia and an aversion to any kind of sensory stimuli, including the touch of his daughter. His pulse, respiratory rate and blood pressure were found to be within normal limits. He had no focal neurological deficit and no neck stiffness. He had been to the District Headquarter Hospital (DHH) in Sundergarh district for treatment and was referred from there. He had taken neither anti-rabies vaccine (ARV) nor rabies immunoglobulin (RIG).

TREATMENT AND OUTCOME

He was identified as a case of Clinical Rabies, owing to the suspected mucosal exposure from the history, and referred the General Medicine department for further management. The department after reviewing the case admitted him in the infectious diseases ward. There he was prescribed intravenous diazepam infusion, bolus intravenous lorazepam, intravenous 5% dextrose infusion, intravenous pantoprazole and intravenous ondansetron. He was kept nil-per-oral (NPO) in a dark room. At around 10.20 pm the patient started gasping. Oxygen inhalation was provided along with subcutaneous adrenaline. His condition continued to deteriorate and spontaneous breathing ceased at around 10.45 pm. Cardiopulmonary resuscitation was done for 10 minutes but patient could not be revived. He was declared dead at 11 pm.

CONCLUSION

Each year, rabies causes nearly 50000 deaths globally and of that nearly 20000 deaths are in India alone.[2,5,6] This case report is an example of how the virus transmitted by the saliva of an animal even without a bite or scratch, led to the development of clinical rabies, to which the patient eventually succumbed. It is noteworthy that contact of saliva of stray dog over mucous membrane should be viewed with a degree of suspicion. There needs to be increased awareness among the public to seek medical attention in such cases. Children usually play with dogs and at times get licked over face, including lips and adjoining mucous membrane. Similarly, unknowingly toddlers may nibble the leftover food of pet dogs with or without the knowledge of parents and elders. **India being a rabies endemic country pre-exposure prophylaxis of children, especially in households having pet dogs, should be given due importance.**[7] While it is common for people to visit a doctor in case of deep bite wounds, smaller wounds and unconventional exposures are often ignored. It is disheartening to come across such a

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young casualty of a disease that is 100% preventable. An increase in public awareness can make a significant contribution to prevent deaths due to rabies.

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